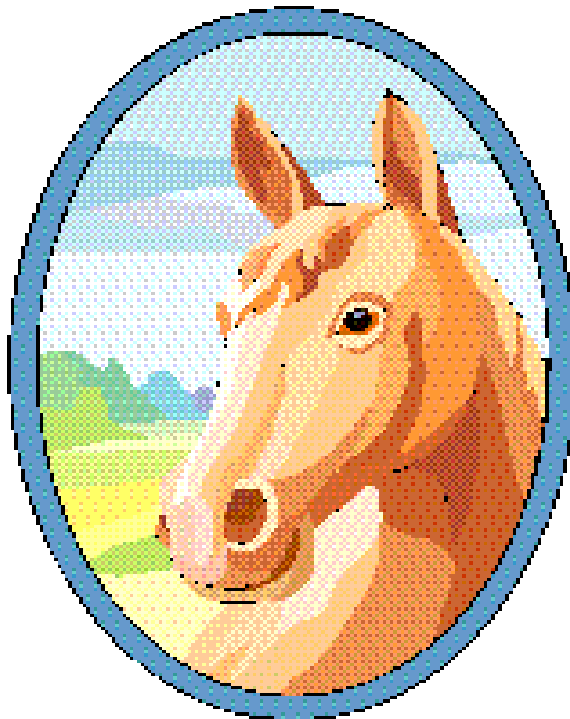


TOWN OF DAVIE

# **LARGE ANIMAL HURRICANE PREPAREDNESS**



**BEFORE A STORM  
INFORMATION  
2004**

# **A HOW TO GUIDE TO PREPARE HORSES AND STABLES FOR HURRICANES**

## **BEFORE THE STORM**

The bond between horses and their human owners is strong. Horse owners in hurricane prone areas like Florida have a large responsibility to be sure that their animals are provided for in the event a hurricane threatens their area. As in many areas of our lives, planning well in advance pays off. Waiting until the storm watch is posted may be too late for you and your animals. (Remember a storm watch means a hurricane poses a threat within 36 hours, a storm warning means a hurricane is expected to strike the area within 24 hours.) Make arrangements well before hurricane season begins (June 1 of each year) to insure that your animals have the best chance to survive with minor injuries.

**These suggestions are offered for educational purposes. Final decisions as to the care of animals rest with the horse owner and their own veterinarian who are most familiar with the individual animal, its temperament and situation.**

## **DEVELOP A WRITTEN PLAN**

Developing a written plan is one of the first steps to insuring your horses' safety. Share the plan with others and let them know how to reach you, or set up a definite contact, out of the area, that you will call, so they can inform others of how you are. The plan needs to be very specific in terms of what needs to be done, who will do it, and a time line for getting the tasks completed. The plan also needs to contain information about where critical supplies and tools are located and where they should be secured for the storm.

Plan in advance where your animals will weather the storm. In a **Class I or II** storm, your horses will most likely be safe in a well-constructed barn or stable. (We will discuss what "well constructed" means later.) In a **Class III or IV** storm, the animals are better off outside, in an area that is free of debris, has strong fences, and has no overhead power lines. If a **Class V** storm threatens, it is probably best to trailer the animals out of the area.

## **EVACUATION**

You need to decide now, at what point you will leave, where you will go, and how far in advance of the storm you will leave. Remember that during an evacuation, traffic will be very heavy, and move very slowly. You need to have several alternative routes, and possible destinations. The worst place for you and your horse to be when a storm hits is on the road in a horse trailer. Make prior arrangements for a place to board your horses at the evacuation destination.

Do not attempt to re-enter your area until it has been declared safe. If you evacuate, call either your local **Emergency Management Division at (954) 831-4000 for Broward County or the Florida State Division of Emergency Management at (954) 831-3900** to be sure your area is safe and roads are clear.

Whether you decide to keep your animals in the barn, the pasture, or trailer them out of the area, it is very important that you have them haltered, preferably with a leather halter, and have them well identified.

In most instances, the best place for your animals is in their regular location. This means however, that you must plan ahead, and keep the facility ready for storms all year long. It is impossible to do all that needs to be done to prepare properly during the watch and warning phases.

1. Develop a list of the feed, hay, water, and other supplies that you will need for your animals if a storm hits. Plan to be self sufficient for a period of at least one week. Have adequate storage of these items.

- a. **Water:** Plan on 12 gallons of water per horse per day. What is the water source at your facility? Is it dependent on electricity or city water systems? If so be sure to store a sufficient supply of water during the watch phase. If you become concerned about the safety of the water, it can be purified with 8 to 12 drops of chlorine bleach per gallon or 12 drops of iodine. If you determine that your animals will spend the storm in their stalls, leave several buckets of water with them. In most instances, they will only drink the top half of the water, and you want to be sure they have plenty in the event you are not able to get back to the barn immediately.

- b. **Food:** Be sure that you have adequate supplies of hay and grain on hand prior to the storm. You may not be able to have additional supplies delivered or be able to get out to pick them up yourself for several days or longer. Grains should be stored in water proof containers, and if possible be up off the floor in the event of flooding. Store your hay in an area that you believe will be as dry as possible, cover well in the event of leaks, and try to raise it off the floor. The University of Florida Extension veterinarians recommend that you not leave grain in the stalls with your horses if you stable them during the storm, and that you leave coastal hay. Coastal will keep them busy searching for the “good parts” during the storm, and without grain they will be less likely to founder.

- c. **Veterinary Supplies:** Just as you need a first aid kit for yourself and your family, you need one for your animals. Check with your own vet to see what she or he recommends that you keep on hand for a storm. At a minimum you should have antiseptic cream or powder, antibiotic cream, bandaging and vet wrap, scissors, tweezers, fly-spray, electrolytes, dewormer, and any specific treatments that your animals may require. Check at the beginning of the hurricane season to see that your supplies are still in date. You and your vet together should make the decision as to whether your animal might need to be tranquilized during a storm. For a very high strung animal, it may help him come through without panicking and injuring himself. However you do not want to tranquilize the animal to the point that he can't react to save himself from dangerous situations.

**If you are keeping your animal in your barn or pasture**, there are some things you can do to help protect him. It is recommended that your horse wear bell boots to help protect us also recommend that you prepare his hoofs to protect them from very wet conditions. Spray his

hooves and frog with a solution of 1 part chlorine bleach and 3 parts water, then coat them thickly with petroleum jelly. This can help to prevent hoof rot. Do not wrap legs.

Flying debris can cause serious injuries to your animals. It is important to remove any debris and trash piles around your own property, and work with others in your immediate neighborhood to get debris cleaned up well before hurricane season starts. Wind will carry items for quite a distance, so try to work with the neighborhood to clean up several blocks around the property where your animals are kept. Be sure to police your own barn as well. Be sure that everything is picked up and securely stored, even a currycomb can become a dangerous weapon in a high wind!

Be sure to write your hurricane plan down. Develop very detailed lists of what you need in the event of a storm, and where you have collected these supplies. Prepare your hurricane plan in a series of steps to be completed. Post one copy in your barn area and send another, especially the location where you might evacuate to a friend or relative out of the area. This will help your family and friends know where to find you after the storm.

### **IDENTIFYING YOUR ANIMALS**

Identifying your animals well is a crucial part of getting them returned to you in the event that they get loose during a disaster. There are a number of recommended ways of clearly identifying your horses:

1. Spray paint your telephone number, including the area code, on the side of the animal with a contrasting shade of acrylic paint.
2. Braid luggage tags into the mane and tail with your name, address, and telephone numbers, and possibly with the numbers of out of the area contacts. Be sure the information is written in water proof ink, and tape the tags to water-proof them further.
3. Fetlock or mare bands with the appropriate information in waterproof ink.
4. Put the information in a sealed plastic bag, and tape it securely to the halter.
5. Horses can also be branded, tattooed and registered, or micro chipped to provide permanent forms of identification.

The more forms of identification that you use, the more likely your animal will be returned to you.

The Broward County Large Animal Disaster Planning Committee also requires that in order to claim an animal that we have collected and cared for, you must show proof of ownership, including a picture of the animal showing any distinctive markings and the family member that comes to claim it. A bill of sale, and coggins form is also needed. It is a good idea to be sure that pictures, ownership papers and Coggins forms are copied and one set sent out of the area to insure their existence. Keep a local set in a sealed plastic bag and container, and keep in a safe place.

## **STRENGTHENING YOUR STABLES & BARN**

In Florida, farm buildings are exempt from the building code, but it is to your advantage to insure that your barns and stables are as close to code as possible. You can have a certified contractor or possibly a county or city building inspector examine your barn or stable and evaluate it for hurricane suitability.

If your basic structure is sound there are things that you can do to further strengthen it:

- Be sure that roof-trusses and posts are tied in and secured with bolts, washers and nuts, not nails.
- Install hurricane straps to each truss joint. Each strap should be attached with six nails, long enough to go through the beam and the point bent down.
- Tie down the barn by excavating around the structural posts, drilling them and placing steel rods through them, and then pouring concrete around the area. Mobile home tie downs can also be used to make the barn more secure.
- Place stall siding on the inside of the stall. This way when the horse leans against it, the sides will not give way.
- Build up doorways of barn and/or stalls 4-6 inches to keep water out and animal's feet dryer
- Be sure you have very secure locks and doors on stalls if you plan to keep animals in the barn during storms. Do not count on rope or wire ties, use slide bolts, or deep hooks.
- Be sure that all electrical wiring is overhead and enclosed in conduit. You do not want horses or people shocked when wet or by exposed wires.
- One of the final steps in securing your stable/barn is to turn off the power at the main switch.

If you are building a new barn or stable consider the prevailing winds when orienting the barn and place it with the ends facing east and west. Place smaller buildings out to the west of the barn. Build it to hurricane ratings, following the South Florida Building Code.

## **SUMMARY**

Your horse depends on you to keep it safe. You need to develop a solid plan, and work the plan. Identify your horse to facilitate its return in the event it gets lost. Strengthen your barn and fences.

Our horses give us much pleasure, but they can become incredibly expensive when injured or sick. Investments in keeping them safe can pay big dividends in preventing injury and heartbreak.

It is suggested that you laminate and post the following numbers on your barn.

**Emergency Numbers:**    **Broward County Emergency Management Center (954)831-4000**  
                                 **FL State Division of Emergency Management (954) 831-3900**  
                                 **Local Police Department (954) 693-8200**  
                                 **Local Fire Department (954) 797-1213**  
                                 **Your Veterinarian**

## Equine/Livestock Evacuation Kit

3 - 7 day supply of food and water

Bandannas (blind folds)

Batteries (flashlight, radio)

Blankets

Copies of Veterinary records and proof of ownership

Duct tape

Emergency contact list

First Aid Kit (see equine first aid kit on page 2)

Flashlight

Fly stray

Heavy gloves (leather)

Hoof knife

Hoof nippers

Hoof pick

Hoof rasp

Instructions

- Diet: Record the diet for your animals.
- Medications: Record dose and frequency for each medication.  
Provide veterinary and pharmacy contact information for refills.

Knife (sharp, all purpose)

Leg wraps

Maps of local area and alternate evacuation routes (in case of road closures)

Non-nylon halters and leads (leather/cotton)

Paper towels

Plastic trash cans with lids (can be used to store water)

Radio (solar and battery operated)

Rope or lariat

Shovel

Tarpaulins

Trash bags

Twitch or nose leads

Water buckets

Wire cutter

## Equine/Livestock First Aid Kit

Consult your veterinarian when developing the first aid kit. The items below serve only as an example of what may be included in a large animal first aid kit.

- Antibiotic ointment (wounds)
- Antibiotic eye ointment
- Bandage scissors
- Bandage tape
- Betadine or Nolvasan (scrub and solution)
- Cotton bandage rolls
- Cotton-tipped swabs
- Elastic bandage rolls
- Eye rinse (sterile)
- Flea and tick treatment
- Gauze pads and rolls
- Hydrogen peroxide
- Isopropyl alcohol/alcohol prep pads
- Latex gloves or non-allergenic gloves
- Medications (clearly labeled instructions)
- Mineral oil (quality sufficient to begin colic treatment-consult a veterinarian)
- Non adherent bandage pads
- Saline Solution (for rinsing wounds)
- Sterile lubricant (water-based)
- Thermometer (digital)
- Tincture of green soap
- Tourniquet
- Towel and washcloth
- Tweezers

This information was obtained from the 2000 American Veterinary Medical Association *Saving the Whole Family* disaster preparedness booklet with the support of the American Veterinary Medical Foundation (AVMF) and the Iams Company and prepared by Cindy S. Lovern, DVM, MS.